Mr. John C. Mingé  
President  
BP Exploration (Alaska), Inc.  
900 East Benson Boulevard  
Anchorage, AK 99519-6612

Re: CPF No. 5-2008-5031

Dear Mr. Mingé:

Enclosed please find the Final Order issued in the above-referenced case. It makes a finding of violation, withdraws one allegation of violation, and finds that BP Exploration (Alaska), Inc., has completed the actions specified in the Notice to comply with the pipeline safety regulations. Therefore, this case is now closed. Service of the Final Order by certified mail is deemed effective upon the date of mailing, or as otherwise provided under 49 C.F.R. § 190.5.

Thank you for your cooperation in this matter.

Sincerely,

Jeffrey D. Wiese  
Associate Administrator  
for Pipeline Safety

Enclosure

cc:  Mr. David O. Barnes, P.E., DOT & Integrity Manager, BP Exploration (Alaska), Inc.  
Mr. Michael Rocereta, Vice President BP Transportation Alaska  
Mr. Chris Hoidal, Director, Western Region, OPS  
Mr. Alan Mayberry, Deputy Associate Administrator for Field Operations, OPS

CERTIFIED MAIL - RETURN RECEIPT REQUESTED [71791000164203450378]
On November 6-8, 2007, pursuant to 49 U.S.C. § 60117, a representative of the Pipeline and Hazardous Materials Safety Administration (PHMSA), Office of Pipeline Safety (OPS), conducted an on-site pipeline safety inspection of the facilities and records of BP Exploration (Alaska), Inc.’s (BPXA or Respondent) Milne Point Sales Oil Pipeline and Northstar Oil Transit Line located on the North Slope of Alaska. BPXA operates 15 North Slope oilfields, including Prudhoe Bay, Northstar, Endicott and Milne Point. The Milne Point pipeline is 10.5 miles in length and transports crude oil from the Milne Point Central Facility Pad to the Kuparuk Pipeline. The Northstar pipeline is 17.15 miles in length and transports crude oil from an island constructed in the Beaufort Sea to Pump Station #1 on the TransAlaska Pipeline.1

As a result of the inspection, the Director, Western Region, OPS (Director), issued to Respondent, by letter dated September 10, 2008, a Notice of Probable Violation and Proposed Compliance Order (Notice). In accordance with 49 C.F.R. § 190.207, the Notice proposed finding that BPXA had committed two violations of 49 C.F.R. Part 195 and proposed ordering Respondent to take certain measures to correct the alleged violations. The Notice also proposed finding that Respondent had committed certain other probable violations of 49 C.F.R. Part 195 and warning Respondent to take appropriate corrective action or be subject to future enforcement action.

BPXA responded to the Notice by letters dated April 23 and October 10, 2008 (collectively, Response). The company contested the two allegations of violation and provided information concerning the corrective actions it had taken. Respondent did not request a hearing and therefore has waived its right to one.

FINDINGS OF VIOLATION

The Notice alleged that Respondent violated 49 C.F.R. Part 195.579(a), as follows:

Item 1: The Notice alleged that Respondent violated 49 C.F.R. § 195.579(a), which states:

§ 195.579 What must I do to mitigate internal corrosion?
   (a) General. If you transport any hazardous liquid or carbon dioxide that would corrode the pipeline, you must investigate the corrosive effect of the hazardous liquid or carbon dioxide on the pipeline and take adequate steps to mitigate internal corrosion.
   (b) Inhibitors. If you use corrosion inhibitors to mitigate internal corrosion, you must—
      (1) Use inhibitors in sufficient quantity to protect the entire part of the pipeline system that the inhibitors are designed to protect;
      (2) Use coupons or other monitoring equipment to determine the effectiveness of the inhibitors in mitigating internal corrosion; and
      (3) Examine the coupons or other monitoring equipment at least twice each calendar year, but with intervals not exceeding 7½ months.

The Notice alleged that Respondent violated 49 C.F.R. §§ 195.579(a) by failing to investigate the corrosive effects of the hazardous liquids transported in its two pipelines and to take adequate steps to mitigate any corrosion. According to the Notice, BPXA had been monitoring the portions of its lines located upstream of ones regulated under 49 C.F.R. Part 195, but had no records showing that the liquids being transported on the downstream DOT-regulated lines would not corrode the lines or that the company had installed coupons to monitor potential corrosion. The Notice also asserted that BPXA did not have a comprehensive internal corrosion control program to determine if the hazardous liquids being transported would corrode the lines and, if so, to take appropriate steps to mitigate the corrosion.

In its Response, BPXA denied the allegation and raised several defenses. First, Respondent argued that in its 23 years of operating the Milne Point line and seven years of operating the Northstar line, there had been no indication of any internal corrosion or any of damage that would require mitigation. Second, the company contended that it had indeed monitored the potential for internal corrosion through various methodologies detailed in its Tier 2-Operations and Maintenance (O&M) Manual, Corrosion Management Strategy.2

One such methodology involved the use of coupons. While acknowledging that it had not installed coupons on its PHMSA-regulated pipe segments, the company argued that the coupons were placed in the same fluid stream that ran through both the non-regulated upstream segments and the regulated downstream segments and therefore that the coupon results represented an accurate assessment of both. Respondent further explained that the coupons were pulled and analyzed with a frequency that met or exceeded the requirements of 49 C.F.R. § 195.579(b)(3). The company stated that it had performed this type of analysis in the past and had provided the data to PHMSA, demonstrating that the product being transported was non-corrosive.

2 Response at 3.
Another such methodology involved the use of corrosion rate monitoring (CRM) at 23 locations on the Milne Point pipeline and 26 locations on the Northstar line. BPXA explained that none of the CRM locations had shown any wall loss or corrosion as of the date of its second Response letter on October 10, 2008.

Finally, the company submitted information on its maintenance pigging program used to manage water, sediment, and wax that could contribute to microbiological corrosion. Respondent explained that it had performed quarterly maintenance pig runs on the Milne Point pipeline and bi-weekly maintenance pig runs on the Northstar pipeline.

After reviewing the materials submitted with the Response, including BXPA’s pigging schedule, performance metrics, and its Corrosion Management Strategy Document, I agree that BPXA’s internal corrosion program satisfies the requirements under 49 C.F.R. § 195.579(a). Accordingly, based upon a review of all the evidence, I hereby order that Item 1 of the Notice be withdrawn.

**Item 2:** The Notice alleged that Respondent violated 49 C.F.R. § 195.583(a), which states:

**§ 195.583 What must I do to monitor atmospheric corrosion control?**

(a) You must inspect each pipeline or portion of pipeline that is exposed to the atmosphere for evidence of atmospheric corrosion, as follows:

<table>
<thead>
<tr>
<th>If the pipeline is located:</th>
<th>Then the frequency of inspection is:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Onshore .....................</td>
<td>At least once every 3 calendar years, but with intervals not exceeding 39 months.</td>
</tr>
<tr>
<td>Offshore .....................</td>
<td>At least once each calendar year, but with intervals not exceeding 15 months.</td>
</tr>
</tbody>
</table>

(b) During inspections you must give particular attention to pipe at soil-to-air interfaces, under thermal insulation, under Disbonded coatings, at pipe supports, in splash zones, at deck penetrations, and in spans over water.

(c) If you find atmospheric corrosion during an inspection, you must provide protection against the corrosion as required by § 195.581.

The Notice alleged that Respondent violated 49 C.F.R. §§ 195.583(a) by failing to conduct inspections of its Milne Point and Northstar pipelines for evidence of atmospheric corrosion, at least once every three calendar years but at intervals not exceeding 39 months. Specifically, the

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3 CRM locations are sites where the wall thickness is measured at the same location every six months using ultrasonic equipment. Unlike coupons, these sites provide direct measurement of the pipe wall thickness at each location. Response at 2.
Notice alleged that although BPXA’s O&M Manual\(^4\) contained adequate procedures under the regulation, there was no evidence, either paper or electronic, showing that the required inspections had actually been conducted. In support, PHMSA asserted that there were several locations on the Milne Point and Northstar pipelines with inadequate coating or bare steel.\(^5\)

The company did not contest the allegation of violation but provided an explanation of its actions. BPXA explained that after PHMSA’s inspection, it had enhanced its Periodic Maintenance (PM) activities to document more comprehensively the requirements, timing, and findings of its atmospheric corrosion inspections. Respondent also stated that it had completed atmospheric corrosion inspections of the two pipelines, that it had submitted documentation demonstrating that no corrosion had been found on either line, but that the company had nevertheless recoated the Northstar pipeline launcher. The company also stated that it was committed to having all modifications to its PM system completed by the end of 2009.\(^6\)

PHMSA subsequently completed a review of BPXA’s revised procedures and documentation on the recoat of the Northstar pipeline pig launcher. PHMSA also scheduled a verification inspection trip between November 16 and November 20, 2010, and set a subsequent inspection of BPXA’s procedures and records.

It is important, as a general rule, for operators to conduct regular inspections for atmospheric corrosion to assure PHMSA and the public that the operator is operating its pipeline safely. This is particularly true for pipelines operating in environmentally sensitive areas such as the North Slope. Accordingly, having reviewed all of the evidence, I find that BPXA violated § 195.589(a) by failing to conduct inspections of the Milne Point and Northstar pipelines for atmospheric corrosion, at least once every three calendar years but at intervals not exceeding 39 months.

**COMPLIANCE ORDER**

The Notice proposed a compliance order with respect to Items 1 and 2 in the Notice for violations of 49 C.F.R. §§ 195.579(a) and 195.583(a). Under 49 U.S.C. § 60118(a), each person who engages in the transportation of hazardous liquids or who owns or operates a pipeline facility is required to comply with the applicable safety standards established under chapter 601.

The allegation of violation for Item 1 has been withdrawn. Accordingly, the compliance terms for Item 1 are not included in this Order. With respect to Item 2, the Director indicates that Respondent has taken the following actions specified in the proposed compliance order:

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\(^5\) Id. at 5.

\(^6\) Response at 4.
With respect to the violation of § 195.583(a) (Item 2), Respondent completed atmospheric corrosion inspections of the Northstar and Milne Point pipelines and recoated the Northstar pipeline pig launcher. Respondent also provided PHMSA with photographs of these actions.

Accordingly, I find that compliance has been achieved with respect to this violation. Therefore, the compliance terms proposed in the Notice are not included in this Order and no further action is required.

**WARNING ITEM**

With respect to **Item 3**, the Notice alleged a probable violation of Part 195 but did not propose a civil penalty or compliance order for this item. Therefore, this is considered to be a warning item. The warning was for:

49 C.F.R. § 195.420(b) (Notice **Item 3**) — Respondent’s alleged failure to provide records to demonstrate that it had inspected, at intervals not exceeding 7½ months but at least twice each calendar year, each mainline valve on its Northstar pipeline facility to determine that it functioned properly.

Respondent presented information in its Response showing that it had taken action to ensure that valve maintenance was performed according to Part 195 and that the company retained appropriate documentation. Having considered such information, I find, pursuant to 49 C.F.R. § 190.205, that a probable violation of 49 C.F.R. § 195.420(b) (Notice Item 3) occurred and Respondent is hereby advised to correct such conditions. In the event that OPS finds a violation for this item in a subsequent inspection, Respondent may be subject to future enforcement action.

Under 49 C.F.R. § 190.215, Respondent has a right to submit a Petition for Reconsideration of this Final Order. The petition must be sent to: Associate Administrator, Office of Pipeline Safety, PHMSA, 1200 New Jersey Avenue, SE, East Building, 2nd Floor, Washington, DC 20590, with a copy sent to the Office of Chief Counsel, PHMSA, at the same address. PHMSA will accept petitions received no later than 20 days after receipt of service of this Final Order by the Respondent, provided they contain a brief statement of the issue(s) and meet all other requirements of 49 C.F.R. § 190.215. Unless the Associate Administrator, upon request, grants a stay, the terms and conditions of this Final Order are effective upon receipt of service.

Jeffrey D. Wiese
Associate Administrator
for Pipeline Safety

Date Issued